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Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Restoring Internet Freedom*, WC Docket No. 17-108

Dear Ms. Dortch:

INCOMPAS hereby files this ex parte in response to inaccurate and misleading claims made by certain parties that the Commission need not oversee interconnection to enable an open internet and that competition in the residential broadband Internet access service (“BIAS”) marketplace is sufficient to constrain BIAS behavior. As several commenters have explained, the internet is a network of networks, and interconnection and traffic exchange are key to the delivery of internet content to consumers.

Blocking at the point of interconnection is blocking plain and simple—a violation of bi-partisan principles that have governed a free and open internet for decades. Since the *2015 Open Internet Order*, we have seen an unprecedented increase in streaming services that save consumer’s money, and a steep migration to cloud services by business large and small. As more consumers and devices are connected to the Internet, the significance of interconnection is consequential for the nation. Accordingly, INCOMPAS urges the Commission to disavow itself of its proposal to stop exercising the jurisdiction and oversight of interconnection that Congress granted it so that the Commission can continue to ensure that the broadband networks serve the *nation’s* interests, not just BIAS providers’ own interests.

I. THE RECORD SHOWS THAT LARGE BIAS PROVIDERS HAVE CONGESTED INTERCONNECTION POINTS, PREVENTING CONSUMERS FROM ACCESSING INTERNET CONTENT OVER THE BIAS SERVICE THAT THEY HAVE PAID FOR.

The large BIAS providers have been caught deliberately congesting interconnection points, so they attempt to divert the Commission’s attention by falsely claiming that the congestion they caused was not their fault. Instead, they blame edge and transit providers,

including members of INCOMPAS.¹ As discussed by Level 3, Netflix, and Cogent, however, the large BIAS providers and their trade associations cannot rewrite history.² The evidence

¹ See AT&T Reply Comments, WC Docket No. 17-108, at 40 (“[I]t is now widely understood that the congestion at the heart of these complaints was an entirely avoidable result of routing decisions by Netflix and its transit providers, Cogent and Level 3 . . . The receiving network has no control over how the traffic comes into its facilities, and it cannot prevent content networks and transit providers from teaming up to cause serious congestion problems by pushing a large amount of traffic over a small set of interconnection links.”). Comcast Reply Comments, WC Docket No. 17-108, at 36-37 (“[I]t is edge providers like Netflix (or their agents) that decide how to route their traffic, and when congestion occurs, it is often attributable to those routing choices rather than to any ISP actions. In the case of Netflix, the Commission has received voluminous submissions showing that the congestion issues experienced by Comcast customers arose because of Netflix’s unilateral routing decisions, not because of actions taken by Comcast.”). NCTA Comments, WC Docket No. 17-108, at 35-36 (“Netflix was solely responsible for determining how to route its content to BIAS networks, and its unilateral business decision to abandon third-party CDN arrangements on which it had long relied in favor of its own CDN led to brief negotiating impasses as Netflix (and Cogent) sought to upend traditional economic arrangements.”).

² Letter from Joseph C. Cavender, Vice President & Assistant General Counsel, Federal Affairs, Level 3 to Marlene H. Dortch, Secretary, FCC, WC Docket No. 17-108, at 2 (Sept. 15, 2017) (“AT&T’s story is false. To be clear, using AT&T’s own words: ‘in the years leading up to the *Title II Order*’ Level 3’s peering agreement with AT&T did *not* ‘require[] a reasonable balance of exchanged traffic as a condition of settlement-free interconnection.’ AT&T has simply made its story up. What is more, AT&T itself has already turned over documents to the Commission that provide its story is false: AT&T and Level 3 produced their peering agreement as part of the Commission’s investigation of Internet traffic exchange practices in 2014.”) (“Level 3 Letter”). See also Comments of Netflix, WC Docket No. 17-108, at 2 (“[B]roadband internet access services providers can use (and have used) gatekeeper power to restrict consumers’ ability to access the content they choose, especially from growing and competitive firms.”). Netflix also cites to its pleadings in other FCC dockets and its blogs. “Netflix agreed to pay Comcast for direct interconnection to reverse an unacceptable decline in our members’ video experience on the Comcast network. These members were experiencing poor streaming quality because Comcast allowed its links to Internet transit providers like Level 3, XO, Cogent and Tata to clog up, slowing delivery of movies and TV shows to Netflix users.” Ken Florance, *The Case Against ISP Tolls*, Netflix Company Blog (April 24, 2014) *available at* <https://media.netflix.com/en/company-blog/the-case-against-isp-tolls>. Cogent Comments, WC Docket No. 17-108, at 3 (“Both BIAS and transit provider networks have sufficient capacity to accept and deliver the increased amount of bandwidth-intensive content end users are currently demanding. At times, certain BIAS providers have simply chosen not to do so.”).

submitted in this docket, the prior Commission findings in two merger proceedings after the *2015 Open Internet Order*,³ and the *2015 Open Internet Order* itself⁴ demonstrate that the largest BIAS providers have purposefully congested interconnection points, harming their own subscribers from accessing the content of their choice over the BIAS connections they paid for.

But the FCC is not alone in its observations of BIAS providers' interconnection practices that have hindered the delivery of the BIAS services consumers have purchased. The New York State Office of the Attorney General confirms this history of degradation of interconnection and traffic exchange in its filed comments in this docket. The New York Attorney General highlights its recent and ongoing investigations of major BIAS providers, stating that it has uncovered documentary evidence that:

[F]rom at least 2013 to 2015, major BIAS providers made the deliberate business decision to let their networks' interconnection points become congested with Internet traffic and used that congestion as leverage to extract payments from backbone providers and edge providers, despite knowing that this practice lowered the quality of their customers' Internet service. This practice was not limited to a single instance or locality: NYOAG has found that this practice was used for years by at least two of the country's biggest BIAS providers who operate in New York and in many other states.⁵

In fact, the New York Attorney General has now filed a lawsuit against one large BIAS provider for failing to deliver to the consumers the BIAS service it sold them. Further, M-Lab filed in this

³ Applications of AT&T Inc. & DIRECTV, 30 FCC Rcd. 9131, ¶ 217 (2015) ("Thus, as stated in the *2015 Open Internet Order*, we find that 'broadband Internet access providers have the ability to use terms of interconnection to disadvantage edge providers and that consumers' ability to respond to unjust or unreasonable broadband provider practices are limited by switching costs.' We appreciate commenters' concerns in this area.") ("*AT&T-DIRECTV Order*"); Applications of Charter Communications, Inc., Time Warner Cable Inc., & Advance/Newhouse Partnership for Consent to Assign or Transfer Control of Licenses and Authorizations, *Memorandum Opinion and Order*, 31 FCC Rcd. 6327, ¶¶ 128-129 (2016) (finding that New Charter, like Time Warner Cable, would use interconnection to interfere with OVD service delivery for the purpose of inhibiting or eliminating OVD competition) ("*Charter-TWC Order*").

⁴ *2015 Open Internet Order*, 30 FCC Rcd. 5601, ¶ 205 (finding "broadband Internet access providers have the ability to use terms of interconnection to disadvantage edge providers and consumers' ability to respond to unjust or unreasonable broadband provider practices are limited by switching costs").

⁵ Comments of The People of the State of New York by Attorney General Eric T. Schneiderman (NY Attorney General), WC Docket No. 17-108, at 2.

docket its observations that confirm this history of degradation, stating that it “represented a substantial impediment to accessing certain content for several prominent access ISPs, lasting for months and leading to download throughput speeds well below the definition of broadband.”⁶ And as so aptly stated by the Open Technology Institute of New America, “[m]illions of Americans have suffered as collateral damage . . . whether consumers continue to suffer . . . should be the primary metric” of the Commission.⁷ These filings confirm that large BIAS providers have engaged in behavior that harms their own consumers.⁸

As we discuss further below, the sale of BIAS and the delivery of an open Internet is dependent on BIAS providers’ interconnection and traffic exchange practices, and numerous parties note that such practices have improved since the issuance of the *2015 Open Internet Order*.⁹ Indeed, 70% of consumers believe the Internet has improved in the last few years.¹⁰ If the Commission were to relinquish its oversight of interconnection and internet traffic exchange as contemplated in the NPRM, we expect that large BIAS providers will revert to exercising their incentive to engage in congestion practices at interconnection to force edge and transit providers to pay them which will harm the investment in Internet content and services.¹¹ This expectation

⁶ M-Lab Letter, WC Docket No. 17-108, at 2, July 12, 2017.

⁷ Open Technology Institute at New America Reply Comments, WC Docket No. 17-108, at 41.

⁸ Cogent Comments, WC Docket No. 17-108, at 10 (explaining that it received complaints from customers whose employees were functionally blocked from telecommuting for several months because of congestion).

⁹ *Id.* at 3, 8 & 16-18 (noting that congestion improved after the *2015 Open Internet Order* was issued: “Shortly after it became apparent that the Commission would reclassify the provision of BIAS and provide a forum for interconnection disputes to be resolved, previously recalcitrant ISPs agreed to augment capacity at the points where they exchange traffic with transit/content providers.”). *See also* Level 3 Letter at 1.

¹⁰ Imge Insights, Open Internet Survey, at 1 *available at* <http://www.incompas.org/files/IMGEInsights-Presentations-KeyFindings-1c.pdf>.

¹¹ Cogent Reply Comments, WC Docket No. 17-108, at 8-9 (“[C]ontracts have finite terms, exit clauses and the potential for breach. Thus, if post-Title II Order contracts terminate for any reason, BIAS providers and transit providers will be in the exact same situation they were before the Title II Order: a game of chicken characterized by growing, consumer-harming congestion at interconnection points. That is why the Title II Order stopped this game and largely catalyzed the elimination of congestion. Should the Commission now ignore interconnection, as the NPRM proposes, there is no reason to believe BIAS providers will adopt a strategy different than the one pursued prior to the Title II Order. No reasonable public policy goal would be served by the

is reasonable based on past BIAS providers' harmful actions, but also because the companies and Wall Street analysts have confirmed this will be the result.¹²

II. THERE IS AMPLE EVIDENCE THAT BROADBAND PROVIDERS HAVE THE INCENTIVE AND ABILITY TO DISCRIMINATE AGAINST OVD TRAFFIC, INCLUDING BY CONGESTING INTERCONNECTION POINTS.

In addition to evidence in the record that large BIAS providers can and have caused congestion at interconnection points, the record is replete with evidence of broadband providers' incentives and abilities to discriminate against unaffiliated OVD traffic, which they view as a competitive threat to their MVPD revenues. In response, the Commission has tried to safeguard against such practices—withdrawing the Commission's ability to do so would be an error that will harm consumers.

The Commission has repeatedly recognized that broadband providers have the incentive to harm unaffiliated OVDs. As early as 2010, when the OVD industry was nascent, the Commission warned against broadband providers' tactics against competitors that relied on the broadband providers' infrastructure to deliver services.¹³ It made similar findings in subsequent proceedings. In the AT&T-DIRECTV merger proceeding, the Commission determined that the transaction would create an incentive and ability to harm competing OVDs.¹⁴ The Commission

resurrection of that situation. Thus, the Commission should preserve its oversight of interconnection.”).

¹² See Comm Daily, Wireline Telcos Under Stress; Some Seen Struggling to Survive, Others Coping but Challenged, Oct. 24, 2017 (“Frontier hopes a planned FCC rollback of Communications Act Title II net neutrality regulation gives broadband providers more freedom to explore new market arrangements, and believes internet edge companies should do more to fund networks. [Paul] Gallant said that ‘at the margins, greater telco ability to collect new interconnection fees will help.’”).

¹³ See *2010 Open Internet Order*, 25 FCC Rcd. 17905, ¶ 22 (“Today, broadband providers have incentives to interfere with the operation of third-party Internet-based services that compete with the providers’ revenue-generating telephony and/or pay-television services . . . By interfering with the transmission of third parties’ Internet-based services or raising the cost of online delivery for particular edge providers, telephone and cable companies can make those services less attractive to subscribers in comparison to their own offerings.”).

¹⁴ *AT&T-DIRECTV Order*, 30 FCC Rcd. at 9207–08, ¶ 205 (2015) (“We conclude that post-transaction AT&T has an increased incentive to discriminate against unaffiliated OVDs. As we have found in other proceedings, ‘broadband providers have incentives to interfere with and disadvantage the operation of third-party Internet-based services that compete with their own services.’”); see also *id.* at 9214 ¶ 217 (“Thus, as stated in the *2015 Open Internet Order*, we find

also reiterated that broadband providers could use interconnection as leverage, and imposed a reporting condition to allow the Commission to monitor all the merged entity's interconnection agreements.¹⁵ Finally, the Commission determined that the Charter-TWC transaction would also create an incentive and ability for New Charter to harm competing OVDs.¹⁶ The Commission was particularly concerned by the merged entity's ability to harm through its control over interconnection.¹⁷ In response, the Commission required Charter to interconnect with edge providers so as to safeguard against the new entity abusing its power over interconnection points.¹⁸ The Commission has not been alone in its concerns about BIAS provider incentives to harm competing OVDs—DOJ also has raised concerns in its merger reviews.¹⁹ The agencies' analyses still hold true today and must be heeded.

that 'broadband Internet access providers have the ability to use terms of interconnection to disadvantage edge providers and that consumers' ability to respond to unjust or unreasonable broadband provider practices are limited by switching costs.'").

¹⁵ *Id.* at 9215, ¶ 219 ("[W]e impose additional conditions that require the combined entity to file all interconnection agreements with the Commission and to provide the Commission with certain interconnection performance metrics, which we will use in combination to monitor the terms and effects of such interconnection arrangements.").

¹⁶ *Charter-TWC Order*, 31 FCC Rcd. at 6343-42, ¶ 39 (2016) ("We find that New Charter will have greater incentives to harm those OVDs that serve as a substitute for, and therefore compete with, New Charter's video services"); *see also*, 31 FCC Rcd. at 6344 ¶ 41 ("And while Netflix and Amazon Prime have focused on movies and past seasons of TV, they are increasingly competing with portions of the MVPD programming bundle by distributing more original programming, thus making Charter's past actions towards them less predictive of New Charter's future actions. The Applicants' claimed openness to complementary OVDs that provide unique programming therefore sidesteps the Applicants' incentive to harm those OVDs that compete more directly with its MVPD service.").

¹⁷ *Id.* at 6387 ¶ 125 ("New Charter will have a greater ability to harm OVDs through its enhanced control over interconnection than either Charter or Time Warner Cable could individually.").

¹⁸ *Id.* at 6389, ¶ 131 ("Accordingly, we impose a limited set of conditions related to interconnection. Specifically, we impose a mandatory interconnection condition that will ensure that a competitive market for access to New Charter's networks exists, and a disclosure condition that will allow the Commission to detect abusive behavior by New Charter.").

¹⁹ *See INCOMPAS Comments*, WC Docket No. 17-108, at 14-15 (citing DOJ complaints).

III. THERE IS INADEQUATE COMPETITION FOR RESIDENTIAL, HIGH-SPEED BIAS, AND CONSUMERS CANNOT EASILY SWITCH PROVIDERS.

Often consumers do not even know that the interconnection congestion caused by the BIAS provider is the reason for the degraded quality of their BIAS service.²⁰ Even if a customer can determine that it is the BIAS provider's fault and wants to leave and can afford the high switching costs and inconvenience, they often lack an effective substitute. In most places, consumers have access to only one broadband provider that offers high-speed connections. The Commission's most recent report on Internet Access Services confirms this—noting that only 42% of census blocks has the presence of two or more high-speed providers.²¹

Not surprisingly large BIAS providers and their trade associations argue that the Commission should ignore the lack of competitive choice for high-speed residential broadband asserting that lower speeds, mobile broadband and satellite broadband constrain their behavior.²²

²⁰ See Gerry Smith, "The U.S. Government Is Investigating Why Your Netflix Is So Slow," *available at* https://www.huffingtonpost.com/2014/06/13/netflix-slow-fcc-verizon_n_5492542.html ("When Internet service slows, it is often impossible for the public to tell which company is at fault because the details of such arrangements are kept secret."). See also FTC Commissioner Terrell McSweeney Testimony before the House Judiciary Committee, at 2, *available at* https://www.ftc.gov/system/files/documents/public_statements/1268963/mcsweeney_oral_testimony_to_us_house_of_representatives_committee_on_the_judiciary_11-1-17_.pdf (describing how will consumers know why their service is slow).

²¹ See FCC Report on Internet Access Services: Status as of June 30, 2016, at 6 *available at* https://apps.fcc.gov/edocs_public/attachmatch/DOC-344499A1.pdf (showing that deployment in developed census blocks by more than one provider is limited at 25/3 Mbps—58% of census blocks have only one or a monopoly fixed provider; 29% only have a duopoly presence; and 13% have three or more providers; and of course, the number of providers shown is presence in a census block. It "does not necessarily reflect the number of choices available to a particular household and does not purport to measure competition.")

²² See, e.g., Letter from Matt Brill on behalf of NCTA, WC Docket No. 17-108, at 4-5 (Oct. 5, 2017) ("NCTA Letter"); Verizon Reply Comments, WC Docket No. 17-108, at 11-14. Importantly, a recent study confirms that "for both technical and business reasons, wireless technologies are not now, and will not be in the near to medium future, adequate alternatives or substitutes for wireline broadband." Mobile Broadband Service is Not an Adequate Substitute for Wireline, CTC Technology & Energy, Oct. 2017, *available at* https://www.cwa-union.org/sites/default/files/ctc_mobile_broadband_white_paper_-_final_-_20171004.pdf. INCOMPAS is submitting this report into the docket for the Commission's consideration.

However, as described above, the availability of those (limited speed) choices has not been effective in preventing large BIAS providers from exercising their incentives to engage in actions that harm consumers.

The large BIAS providers and their trade associations also assert that the definition of 25/3 Mbps is irrelevant, but the evidence shows that consumers are purchasing and using faster broadband connections and that they are marketing speeds higher than 25/3 Mbps as their primary BIAS service. Contrary to NCTA's claim, the Commission has not limited its definition solely to one report.²³ In merger reviews, the Commission has found that the speeds are rapidly increasing to serve consumer demand.²⁴ It is also telling that several large incumbent BIAS providers are promoting speeds higher than 25/3 Mbps generally. For example, Charter is offering consumers "fast internet speeds starting at 60 Mbps."²⁵ AT&T advertises "with speeds up to 50 Mbps, you can stream video, download music and photos, and stay connected to everything you love."²⁶ And Verizon FIOS is offering its 50 Mbps and Gigabit plans for its Internet only service,²⁷ and for its bundled products, it is promoting its Gigabit plans.²⁸ Of course, this is not surprising given that many households now have multiple family members using multiple mobile devices via Wi-Fi and are using cloud services,²⁹ over the top video

²³ NCTA Letter at 3.

²⁴ *Charter/TWC Order* ¶ 59 ("[S]everal commenters contend that the Commission should focus on BIAS subscribers receiving download speeds of 25 Mbps or faster. We observe that currently there is no single speed that perfectly captures the wired BIAS market. We agree with commenters who argue that the BIAS marketplace is rapidly evolving as consumers increasingly use multiple devices at the same time and bandwidth intensive applications.").

²⁵ See GET CHARTER SPECTRUM INTERNET™, available at <http://charterbundledeals.com/INTERNET>.

²⁶ See AT&T INTERNET YOU DESERVE 99% RELIABILITY, available at <https://www.att.com/internet/>.

²⁷ See Shop FIOS Plans, Internet Only, available at <http://fios.verizon.com/fios-plans.html>.

²⁸ See Shop FIOS Plans, Bundles, available at <http://fios.verizon.com/fios-plans.html>.

²⁹ See Barb Darrow, *Cloud Adoption Is Growing But Forecasts Differ on How Much*, FORTUNE (Feb. 22, 2017), available at <http://fortune.com/2017/02/22/cloud-growth-forecast-gartner/> (reporting that overall demand for cloud computing will grow 18% this year); Louis Columbus, *2017 State of Cloud Adoption And Security*, FORBES (Apr. 23, 2017, 12:00 PM), available at <https://www.forbes.com/sites/louiscl Columbus/2017/04/23/2017-state-of-cloud-adoption-and-security/#bd19fd18483b> (quoting a report published by McAfee that hybrid cloud adoption grew threefold in the last year).

(OVD) services,³⁰ and interconnected devices³¹ more than ever before. Consumers are using more bandwidth in their homes and neither DSL, mobile wireless, or satellite can keep up with that demand. NCTA merely cites conclusory statements without *any* legitimate studies that show these other services constrain the incentives of large, incumbent BIAS providers to harm OVDs. As such, the Commission should reject the assertions that there is sufficient competition to constrain large BIAS providers' incentives.³²

In those limited areas where consumers have an alternative high-speed option, high switching costs make it unlikely they will actually switch providers. Indeed, the evidence supports the fact that consumers rarely ever voluntarily switch residential BIAS providers.³³ Netflix has also demonstrated that high switching costs prevents consumers from being able to

³⁰ One report notes that OVD subscriptions in the U.S. are up to 49% of U.S. households in 2016—up from 10 percent in 2009. Cord-cutting isn't happening — this report explains why, CNBC, March 22, 2017, *available at* <https://www.cnbc.com/2017/03/21/cord-cutting-not-happening-deloitte-survey-shows.html>. *See also* Sarah Perez, *Over-The-Top Streaming Video Services To Surge To 330 Million+ Subscribers By 2019*, TECHCRUNCH (May 18, 2015), *available at* <https://techcrunch.com/2015/05/18/over-the-top-streaming-video-services-to-surge-to-330-million-subscribers-by-2019/>; *Over-the-Top Video will Overtake TV within Five Years*, LEVEL 3 COMMUNICATIONS, *available at* <https://www.multivu.com/players/English/8085051-level-3-ott-video-services-study/> (citing a study conducted by Level 3, Streaming Media, and Unisphere showing that total over-the-top viewership hours will surpass traditional broadband TV within the next five years).

³¹ Press Release, *Gartner Says 8.4 Billion Connected “Things” Will Be in Use in 2017, Up 31 Percent From 2016*, GARTNER (Feb. 7, 2017), *available at* <http://www.gartner.com/newsroom/id/3598917>.

³² Large BIAS providers also assert that they are not “gatekeepers” for consumer access to edge content because there is sufficient BIAS competition. *See, e.g.*, Verizon Reply Comments at 20; NCTA Letter at 7. For the reasons stated herein, the Commission should reject this argument. Even where there may be a duopoly in some limited geographic areas, the incentives of the large BIAS providers to engage in harmful behavior have shown that consumers will not be protected where interconnection and traffic exchange are not overseen by the FCC.

³³ *See, e.g.*, David S. Evans, *Economic Findings Concerning the State of Competition for Wired Broadband Provision to U.S. Households and Edge Providers*, at 11-12 (Aug. 29, 2017), <http://www.competitioninstitute.org/Portals/0/Evans%20White%20Paper%20on%20Economics%20of%20Wired%20Broadband%2029Aug2017%20Final%20for%20Publication%20%28002%29.pdf> (demonstrating the difficulty and costs associated with switching broadband providers).

easily react if the broadband provider harms OVDs.³⁴ The switching cost problem is so pervasive that newspaper editorials have been written about it, demonstrating its relevance among the broader public.³⁵ To switch their broadband provider, a consumer likely will need to pay equipment rental fees and an early termination fee, which could end up being several hundred dollars. Not to mention the inconvenience of returning equipment and waiting for a technician to connect the new service.

Verizon and NCTA rely on a Global Strategy Group switching survey conducted by Comcast during the Comcast/TWC merger review asserting that it shows that consumers would switch as a result of BIAS provider behavior harming edge providers.³⁶ However, that study was discredited during the proceeding, and the Commission found in the Charter/TWC merger review that “[t]he results of the survey are meaningless as a statistical matter and provide no reasonable basis for inferring the behavior of BIAS customers in the situations about which the survey inquires.”³⁷ Any reliance on this study would be misguided and contrary to actual evidence that consumers do not switch. NCTA also cites a seven-year old survey by the Commission, claiming that consumers respond to non-price factors—such as better speeds—by switching providers;³⁸ however, that dated study (before broadband was even defined at 4/1 Mbps) actually shows limited switching by consumers on an annual basis of only 17%. NCTA quotes the large BIAS providers’ economists’ conclusions that switching isn’t onerous, but the evidence belies those claims.

In fact, the record demonstrates the *reality* that BIAS subscribers face. When Comcast intentionally allowed congestion to build to harm Netflix’s consumers, Comcast faced no serious consequences by congesting the interconnection points because its customers lacked a

³⁴ Netflix Petition to Deny, MB Docket No. 14-57, at 37-38 (“Based on the results from the Commission’s 2010 Broadband Decisions survey, only 11.6 percent of respondents switched ISPs in the prior year excluding those who changed ISPs because they moved . . . To describe switching wireline broadband providers as an ‘involved process’ is a charitable characterization.”) (“Netflix Petition to Deny”).

³⁵ Lee Schafer, *There’s a Reason for Bad Service from Cable Companies*, Star Tribune (Aug. 7, 2016), <http://www.startribune.com/cable-tv-s-terrible-service-record-is-part-of-the-business-model/389335991/> (“There are some markets where switching really does cost a lot; broadband is one of them.”).

³⁶ Verizon Reply Comments, WC Docket No. 17-108, at 15; NCTA Letter at 6.

³⁷ *Charter/TWC Order* n. 188.

³⁸ NCTA Letter at 6.

competitive alternative and faced high switching costs.³⁹ The same is true in New York—where the Attorney General found that two large BIAS providers were engaged in the same strategy because BIAS competition is inadequate and does not constrain their behavior.

IV. INTERCONNECTION HAS LONG BEEN CONSIDERED PART OF INTERNET ACCESS SERVICES AND THUS PART OF THE OPEN INTERNET RULES

The *NPRM* and certain commenters' claim that the Commission has not regulated interconnection until the *2015 Open Internet Order* are misplaced. Contrary to these claims, the Commission has considered interconnection as part of Internet access services as far back as the *Stevens Report*. Interconnection has thus been part of open Internet concerns for longer than the *NPRM* and certain commenters acknowledge. Abandoning oversight of interconnection disputes now would be a deviation from the Commission's past practice and a threat to the open Internet.

The record demonstrates confusion about the Commission's history of regulating interconnection practices. First, the *NPRM* states that the *2015 Open Internet Order* "deviated [] from Commission precedent to extend its authority to Internet traffic exchange or 'interconnection,' an area historically unregulated and beyond the Commission's reach."⁴⁰ However, this statement does not consider precedent to the contrary. Second, large BIAS providers also claim that the Commission has never regulated interconnection. AT&T claims that "since the dawn of the commercial Internet, the federal government recognized the competitiveness of the interconnection marketplace and assiduously rebuffed calls for its regulation."⁴¹ It argues that "[i]n contrast, the ISP's counterparty—e.g., Cogent or Level 3—remains an unregulated private carrier immune from such complaints, creating new opportunities for regulatory gamesmanship. The Commission should eliminate this market-distorting imbalance by restoring interconnection agreements to the unregulated status they occupied for

³⁹ Netflix Petition to Deny at 62-63 ("Even in the face of significant negative news reports over its congestion strategy, Comcast was able to let congested network conditions persist without fear of losing customers due to its market power in local high-speed broadband markets and because customers faced high switching costs."); *see also* Evans Declarations attached to Petition to Deny at 61 ¶ 112 ("The Netflix experience demonstrates that Comcast has the technical ability to foreclose OVDs from accessing its subscribers and to prevent its subscribers from accessing OVDs. It degraded the video streams that its subscribers were able to obtain from Netflix for a period of approximately 13 months with increasing intensity. This ultimately resulted in the quality of the Netflix signal to some customers deteriorating to the point where the service became unusable.").

⁴⁰ Restoring Internet Freedom, *Notice of Proposed Rulemaking*, 32 FCC Rcd. 4434, ¶ 42 (2017).

⁴¹ AT&T Comments, WC Docket No. 17-108, at 38.

more than two decades before the Title II Order.”⁴² Comcast, claims that “there is no legal or policy basis to perpetuate the Title II Order’s ill-advised approach to interconnection—a marketplace that has thrived in the absence of government intervention.”⁴³

These statements fail to consider Commission precedent or confuse the backbone interconnection market with interconnection between the Internet and a broadband Internet access provider,⁴⁴ which demonstrates that the Commission has considered BIAS interconnection an essential part of Internet access. For example, the *2010 Open Internet Order* clarified that the Commission would monitor and prevent abusive interconnection practices. It noted that the no-blocking rule applied wherever “in the network blocking could occur,”⁴⁵ and that it would examine future interconnection agreements.⁴⁶ But prior to that Order, precedent stretching back decades demonstrates that the Commission has long regulated interconnection practices. In 1998, the *Stevens Report* recognized the necessity of interconnection in the provision of Internet access service, stating that, “[t]o ensure transport beyond the edges of its network, [a large Internet access provider] makes arrangements to interconnect with one or more Internet backbone providers.”⁴⁷ In the same year, the *Advanced Services Order* made clear that the offering of advanced services includes the interconnection to the other networks that’s necessary for the delivery of advanced services.⁴⁸ Four years later, in 2002, the *Cable Modem Order* held that Internet connectivity functions included, “at the most basic level . . . establishing a physical connection between the cable system and the Internet by operating or interconnecting

⁴² *Id.* at 45.

⁴³ Comcast Comments, WC Docket No. 17-108, at 36-37.

⁴⁴ As OTI describes in its Reply Comments, “[i]nterconnection refers to the process by which the ‘network of networks’ exchange traffic with each other. This includes (1) traffic exchanges between two backbone networks (‘backbone-backbone interconnection’) and (2) traffic exchanges between a backbone networks and a BIAS network (‘backbone-BIAS interconnection’). The 2015 Order addressed the latter, backbone-BIAS interconnection.” OTI then rebuts the arguments made by the large BIAS providers that conflate the two types of interconnection. Open Technology Institute at New America Reply Comments, WC Docket No. 17-108, at 45.

⁴⁵ *2010 Open Internet Order*, 25 FCC Rcd. at 17942 ¶ 64 n.200.

⁴⁶ *Id.* ¶ 67 n.209.

⁴⁷ Federal-State Joint Board on Universal Service, *Report to Congress*, 13 FCC Rcd. 11501, 11523 ¶ 66 (1998).

⁴⁸ Deployment of Wireline Services Offering Advanced Telecommunications Capability, *Memorandum Opinion and Order and Notice of Proposed Rulemaking*, 13 FCC Rcd. 24012, 24027 ¶¶ 30-31 (1998).

with Internet backbone facilities.”⁴⁹ And in 2005, in the *Wireline Broadband Order*, the Commission stated that it would “continue to monitor the interconnection practices . . . of all industry participants, including facilities-based Internet access providers, and reserve[d] the ability to act under our ancillary authority in the event of a pattern of anti-competitive conduct.”⁵⁰ Scott Jordan, the FCC’s Chief Technologist from 2014-2016, describes this precedent best: “all of the versions of Internet access service considered by the Commission have included interconnection arrangements.”⁵¹

The Commission has considered interconnection part of Internet access from 1998 to the present. To withdraw from regulating interconnection agreements now would represent a break with Commission precedent.

V. CONCLUSION

The Commission should disregard certain commenters’ inaccurate claims that Netflix, Cogent, or Level 3 caused (either directly or indirectly) the congestion experienced by the Comcast’s customers between December 2013 and January 2014 and that the Commission has not regulated interconnection practices previously. These claims are contrary to the record and the facts. Instead, the Commission should reiterate that broadband providers have the incentive and ability to harm unaffiliated OVDs and that they have done so in the past. The Commission should also maintain its long-standing policy of monitoring interconnection practices and intervening when they threaten an uncontested tenet of open Internet rules.

Respectfully submitted,

/s/Angie Kronenberg
Angie Kronenberg
Chief Advocate & General Counsel

Attachment

⁴⁹ Inquiry Concerning High-Speed Access to the Internet Over Cable & Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities, *Declaratory Ruling and Notice of Proposed Rulemaking*, 17 FCC Rcd. 4798, 4809 ¶ 14 (2002).

⁵⁰ Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, *Report and Order and Notice of Proposed Rulemaking*, 20 FCC Rcd. 14853, 14889 ¶ 145 (2005).

⁵¹ Scott Jordan Reply Comments, WC Docket No. 17-108, at 22.